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March 11, 2008

Via ECFS Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

RE: Initial Comments in WC Docket No. 07-245

Please accept this late-filed copy in the above captioned proceeding. Crown Castle believed it had timely submitted these Comments via the Electronic Comment Filing System (ECFS) on Friday, March 7, 2008. However, as a result of the comments in this Docket being posted to ECFS yesterday, Crown Castle became aware that its Comments apparently were not received by the Commission due to a computer glitch. We have contacted the ECFS help desk to ascertain the source of the problem.

Therefore, we request, pursuant to Section 1.46(b) of the Commission's rules, leave to re-file the Comments to assure the Comments are part of the record and request their acceptance and consideration.

Sincerely,

Robert L. Ritter, Esq.
Legal Department

Attachment

Before the
Federal Communication Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 224 of the Act;	)	WC Docket No. 07-245
Amendment of the Commission's Rules and	)	
Policies Governing Pole Attachments	)	RM-11293
	)	
	)	RM-11303

COMMENTS OF CROWN CASTLE SOLUTIONS CORP.

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Date: March 7, 2008

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COMMENTS OF CROWN CASTLE SOLUTIONS CORP.

Crown Castle Solutions Corp., pursuant to section 1.419 of the Commission's Rules, 47 C.F.R. § 1.419, hereby submits its comments in the above-captioned *Pole Attachment NPRM.*[1]

I. Introduction and Summary

Crown Castle Solutions Corp. and its subsidiaries (collectively, "Crown Castle")[2] are leading developers, owners and operators of neutral-host distributed antenna system ("DAS") networks in the United States. Crown Castle currently operates DAS networks in five states,[3] holds Competitive Local Exchange Carrier ("CLEC") status in eleven states and the District of Columbia,[4] and has several additional DAS networks in various stages of development in multiple states. Crown Castle licenses network capacity on its shared networks to major Commercial Mobile Radio Service ("CMRS") providers, and those CMRS providers employ the

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[1] *Implementation of Section 224 of the Act; Amendment of the Commission's Rules and Policies Governing Pole Attachments*, 22 FCC Rcd 20195 ("*Pole Attachment NPRM*").

[2] Crown Castle Solutions Corp., is a wholly-owned indirect subsidiary of Crown Castle International Corp., the nation's leading operator of shared wireless infrastructure with over 20,000 communications towers.

[3] Crown Castle's networks are in California, New York, Pennsylvania, South Carolina, and Washington.

[4] Crown Castle Solutions Corp. subsidiaries are certified in the following states: California (CA CLEC LLC), District of Columbia (DC CLEC LLC), Florida (FL CLEC LLC), Illinois (IL CLEC LLC), Maryland (MD CLEC LLC), Massachusetts (MA CLEC LLC), Nevada (NV CLEC LLC), New Jersey (NJ CLEC LLC), New York (NY CLEC LLC), Pennsylvania (Pennsylvania CLEC LLC), Virginia (VA CLEC LLC), and Washington (WA CLEC LLC).

DAS network to provide coverage or capacity enhancements to their own networks in their continuing quest to improve the service for their subscribers. Typically, Crown Castle's DAS networks include fiber optic cable, antennas and related equipment attached to existing utility poles.

Crown Castle's ability to exercise its section 224 pole attachment rights[5] on a timely and economic basis is critical to its ability to deploy DAS networks to provide the best, most viable solution to notorious coverage challenges. Its CMRS customers face tight network deployment deadlines and budgets driven by customer demand and financial accountability to investors, an issue magnified by the explosion of data services,[6] the adoption of wireless as a primary communications device,[7] and the development of wireless networks employing recently-auctioned spectrum. These CMRS providers are understandably hesitant to adopt DAS technology unless it will provide timely, economical solutions to their coverage challenges.

Unfortunately, however, the Commission's current pole-attachment environment is not conducive to the efficient deployment of DAS systems. In essence, the section 224 process fails to impose discipline and accountability on pole owners and this deficiency leads to project delays and uncertainty which adversely affects Crown Castle's ability to respond to its customers coverage needs. As a consequence, carriers have been slow to adopt DAS, despite evident benefits of such systems. Ultimately, these delays and uncertainty have the potential to stall the

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[5] As a DAS provider, Crown Castle is a "telecommunications carrier" as that term is defined in the Communications Act of 1934, as amended (the "Act"), 47 U.S.C. § 153(44), and is entitled to access pole attachments pursuant to section 224 of the Act., *id.* § 224.

[6] "About half of the Internet's transmission capacity was going unused in 2002. Today that pipeline has almost doubled in size, and yet the unused portion is down to 30%." Spencer E. Ante, "Back from the Dead," *Business Week* (June 25, 2007) 49, 50.

[7] In 2007, the number of wireless-only homes overtook the number of wireline-only homes. Alex Mindlin, "Cellhpone Only Homes Hit a Milestone," *The New York Times*, August 27, 1007. According to CTIA, 12.7 percent of all U.S. households were wireless-only as of June 2007. CTIA Wireless Quick Facts < http://www.ctia.org/media/industry_info/index.cfm/AID/10323 > (last viewed February 14, 2008).

DAS deployment nationwide, depriving the public of the economic and technological benefits of wireless services in areas that are otherwise difficult to serve.[8] It is therefore vital that the Commission use this opportunity to further the public interest by revising its pole attachment regulatory regime to encourage and streamline the deployment of DAS networks. Specifically, the Commission should clarify the existing "safety, reliability and generally applicable engineering purposes" standard of section 224(f)(2) of the Act, encourage pro-active and expeditious dispute resolution, establish generally applicable best practices, and should decline to adopt a special formula for pole top rates.

II. Discussion

Crown Castle applauds the FCC's initiative in conducting this comprehensive review of the Commission's rules implementing section 224 of the Act since those regulations were adopted to implement portions of the Telecommunications Act of 1996 (the "1996 Act").[9] Specifically, the Commission will consider adopting rules to facilitate pole and conduit access in order to "promote the pro-competitive and deregulatory goals of the Act, as well as to reduce the need of parties to resort to the section 224 complaint process."[10] As discussed below, the Commission should take a variety of steps to promote the pro-competitive and deregulatory goals of the Act by fostering the rapid and economically efficient deployment of DAS networks.

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[8] "A dollar spent on telecom infrastructure produces an outsize impact on the U.S. economy as a whole. Indeed, a growing body of research has found that telecom investment plays a vital role in stimulating economic growth and productivity – more so than money spent on roads, electricity or even education." Ante at 50.

[9] *Pole Attachment NPRM*, 22 FCC Rcd at 20196.

[10] *Id.*

A. The Commission should clarify the "safety, reliability and generally applicable engineering purposes" standard of section 224(f)(2)

1. The Commission should adopt a presumption that pole-top antennas constructed consistent with the NESC standards are safe and may not be prohibited under section 224

The Commission previously declined "to mandate specific access requirements, concluding instead that the reasonableness of particular conditions of access imposed by a utility should be resolved on a case-by-case basis."[11] The Commission emphasized, however, that it "would propose specific rules at a later date if conditions warranted."[12] The time for the Commission to adopt such regulation with respect to pole-top access is at hand.

Fair, non-discriminatory access to pole-top antenna installations is vital to future deployment of DAS technology. The difference in elevation between an attachment above the "supply space" on the pole at approximately 40-45 feet, versus an attachment in the "communications space" at approximately 20-25 feet means, on average, a 40% reduction in the coverage area from the same antenna. The additional antennas and associated equipment to compensate for this reduced propagation would add approximately $750,000 to the development cost of a typical DAS system.[13] Moreover, antennas can safely be deployed in the electrical supply space at the top of the pole, as evidenced by: (i) the fact that some utilities allow such installations;[14] (ii) the routine practice of some utilities to place their own SCADA antennas in the supply space while denying third-party attachers; and (iii) the National Electrical Safety

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[11] *Id.* at 20198-99 (*citing Implementation of the Local Competition Provisions in the Telecommunications Act of* 1996, 11 FCC Rcd 15499, 16071-74 (1996) ("*Local Competition Order*")).

[12] *Id.* at 20199 (citing *Local Competition Order,* 11 FCC Rcd at 16068).

[13] This assumes a 15 mile system with evenly spaced antenna nodes on level terrain. Since many DAS systems are deployed in areas with rolling topography not well served by traditional towers, the reduction in propagation can have an even more dramatic affect on the deployment cost.

[14] These utilities include Potomac Electric Power Company (DC, MD), Duquesne Light Company (PA), Long Island Power Authority (NY), and Seattle City Light (WA).

Code ("NESC"), which provides standards for the safe installation and operation of pole-top antennas.

Nevertheless, many electrical utilities do not evaluate pole-top access on a case-by-case basis, nor do they offer such access on a non-discriminatory basis. Rather, these utilities employ either a blanket policy prohibiting pole-top antennas, or place severe restrictions on pole-top antennas, which operate as a *de facto* blanket prohibition.[15] The utilities attempt to justify such prohibitions or restrictive policies based upon an overbroad interpretation of the language in section 224 which enables utilities to deny access based on "reasons of safety, reliability and generally applicable engineering purposes."[16]

As noted above, however, a blanket prohibition or highly restrictive policies are unwarranted because there are many instances in which DAS antennas can safely be deployed in the electrical supply space on top of the pole. Thus, the "safety, reliability and generally applicable engineering purposes" standard of section 224 should not be read to justify utilities in prohibiting pole top antennas in all instances. Instead, the Commission should adopt a presumption that pole-top antennas constructed consistent with the NESC code are safe and may not be prohibited under section 224(f)(2).

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[15] These utilities include Allegheny Power (MD, OH, PA, WV) with an outright ban, and Consolidated Edison (NY), which allows pole-top attachments with such severe restrictions as to make them unavailable in many circumstances. In addition, some utilities in California, a certified state, have relied on an ambiguity in the California Public Utility Commission facility construction standard to assert a pole-top ban. *See, e.g., Reply Comments of San Diego Gas & Electric Company (U-902-E) on Order Instituting Rulemaking to Establish Uniform Construction Standards for Pole Top Antennas*, submitted in Calif. Public Util. Comm. Rulemaking 07-12-001 (February 15, 2008).

[16] 47 U.S.C. § 224(f)(2).

2. The Commission should apply NESC standards to all attachers

The NESC, established over 80 years ago, is a comprehensive safety standard developed, adopted and revised by a committee of industry professionals under the governance of IEEE.[17] It is devised to promote "the practical safeguarding of persons during the installation, operation, or maintenance of electric supply and communication lines and associated equipment. The NESC contains the basic provisions that are considered necessary for the safety of employees and the public under the specified conditions."[18] Section 235, Subsection I of the NESC ("Clearances in any direction from supply line conductors to communication antennas in the supply space attached to the same supporting structure") provides for the safe installation of wireless antennas by following the clearances specified in Table 235-6.[19] The table provides for a sliding scale of vertical clearance depending on the voltage of the collocated power supply lines, but starting at a minimum clearance of six inches.

Now that one of the world's largest and most respected standards-setting bodies has determined that pole-top antennas may be safely installed and maintained; following these standards, several pole-owning electric utilities have safely deployed DAS antennas on their poles;[20] and there is now a history of safe operation of those facilities. Because these standards are clear and well-accepted, the Commission should apply NESC standards to all attachers as a rebuttable presumption for safe installation. The burden should lie with pole owners to prove

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[17] IEEE, with over 365,000 members in over 150 countries, publishes nearly a third of the world's technical literature in electrical engineering, and manages 900 active standards with an additional 400 in development. IEEE Today < http://www.ieee.org/web/aboutus/today/index.html#standards > (Last viewed February 5, 2008).

[18] IEEE Standards Association Frequently Asked Questions < http://standards.ieee.org/faqs/NESCFAQ.html#q1 . > (Last viewed February 5, 2008).

[19] National Electric Safety Code (NESC), 2007 ED. §235 (2006).

[20] See footnote 14.

why safety concerns dictate more stringent construction rules than the NESC, and the Commission should use its enforcement authority to address alleged violations.

B. The Commission should exercise its existing powers proactively to encourage timely deployment

1. The Commission should take steps to encourage proactive and effective mediation and dispute resolution

Like many other third-party attachers, Crown Castle has experienced significant delays in reaching agreement with pole owners on general agreement terms, and with the pole owners processing pole applications and completing make-ready work. The average time between initial request and contract execution for Crown Castle has been 120 days, with some agreements requiring years to finalize, if ever. Delays of weeks or even months in providing responses to written comments, execution of final pole attachment agreements, or even simple status inquiries are common. Crown Castle has also been told by operational personnel at some utilities that no changes at all will be accepted to the utility's standard-form agreement, despite terms and conditions heavily favoring the pole owner over the attacher. Make-ready work can take up to a year to complete when completed by the pole owner's internal personnel, often because of difficulty in scheduling of crews in the field.

Experiencing similar frustrations, Fibertech ascribes such delays to malice and specific anti-competitive intent on the part of certain incumbent Local Exchange Carriers.[21] Crown Castle does not share this opinion, both because Crown Castle does not in most cases directly compete with pole owners in the provision of DAS service, and because of personal experience. The delays experienced by Crown Castle stem not from malicious intent, but benign

[21] "By failing to perform the surveys and make-ready work required for competitors' attachments in a timely manner, pole owners reap an unfair competitive advantage." *Petition for Rulemaking of Fibertech Networks*, Docket No. RM-11303 (December 7, 2005) at 16-17 ("*Fibertech Petition*").

indifference. As the rules are currently structured, there are simply no economic or regulatory incentives for utilities to comply with the letter or the spirit of the Act.

Regardless of the reason behind delays on the part of pole owner, however, such delays leave Crown Castle and similarly-situated attachers with two equally unattractive options: (1) wait out the delay, which adds additional time and uncertainty to critical network deployments; or (2) file a formal complaint under section 224 of the Act. Unfortunately, filing a formal complaint under section 224 of the Act does not promote timely action on the part of a pole owner as there is no firm deadline for Commission action on a complaint. By way of example, one formal complaint involving section 224 has been pending before the Commission's Enforcement Bureau since February 27, 2006 and another since June 2, 2006.[22] Short of revising the rules to establish a date certain by which the Commission will act on section 224 complaints, the Commission should take steps to encourage parties to utilize the Enforcement Bureau's informal mediation process as an alternative. The Enforcement Bureau staff is both skilled and experienced in resolving difficult and complicated disputes through mediation. A greater use of mediation should provide attachers the ability to break through the utilities' "benign indifference" and come to some agreement without having to employ the Commission's lengthy and expensive formal complaint process.

2. The Commission should adopt best practices as proposed by Fibertech

Crown Castle generally concurs with Fibertech in their thorough review of typical delays incurred in the pole attachment process in accessing records, completing field surveys, and identifying and completing make-ready work. Even the pole owners would concede that this

[22] *See Bright House Networks LLC v. Tampa Electric Company,* File No. EB 06-MD-003; *Comcast Cable Communications Management LLC v. Georgia Power Company,* File No. EB 06-MD-005.

work is not a high priority for their field operations teams, and that lower priority is evident in the often languid response to potential attachers' requests. Therefore, Crown Castle urges the Commission to adopt "a series of best practices drawn from existing precedent and industry practice" proposed by Fibertech,[23] which it correctly notes do not "break new ground, as its proposals have largely been adopted by state commissions or fair-minded utilities and are consistent with existing FCC rules and decisions."[24]

C. The Commission should not adopt a special rate formula for pole-top attachments

The Commission seeks comment on whether pole owners should "receive a higher rate of compensation, because unlike lateral space, each pole has only one top."[25] The plain answer is no. Indeed, even posing the question flies in the face of decades of pole attachment regulation at the federal and state level, and violates one of the basic economic and policy tenants supporting the U.S. regulatory system: utilities should not be permitted to use their poles to extract additional profit from wireless attachers.[26]

To that end, pole attachment compensation under section 224 is designed to ratably reimburse pole owners for their costs. In the case of cable operators, section 224(d)(1) requires the Commission to ensure that "pole attachment rates charged cable operators do not fall below the statutory minimum – incremental costs – or above the statutory maximum – fully allocated costs."[27] The 1996 Act amendments to section 224 carried forward this focus on cost-based

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[23] *Fibertech Petition* at i.

[24] *Id.* at 4-5.

[25] *Pole Attachment NPRM*, 22 FCC Rcd at 20209.

[26] In fact, Congress originally granted the Commission regulatory authority over pole attachments specifically to constrain the ability of utilities to extract monopoly profits from cable television system operators in need of pole, duct, conduit or right-of-way space for pole attachments. *See* S. Rep. No. 580, 95th Cong., 1st Sess. At 19-20 (1977), *reprinted in* 1978 USCCAN 109.

[27] *Alabama Power Company v. FCC*, 773 F.2d 362, 364 (D.C. Cir. 1985).

attachment rates, but for telecommunications carriers, differentially allocate the costs of the portion of the total pole cost associated with the usable portion of the pole and the portion of the total pole cost associated with the unusable portion of the pole.[28]

In this regard, the top of the pole costs no more to construct than any other portion of the pole, and the space is no more finite than the communications space or the electric supply space on the pole.[29] It is a physical necessity that a pole must have a top, and there is currently a highest attacher on every utility pole in the United States. Thus, the very idea of a higher pole top rate makes no sense -- should the electric utilities currently occupying the highest position on hundreds of thousands of poles pay a premium "pole top" rate unless or until a DAS or wireless attacher seeks to go even higher? Should the wireless attacher's "pole top" rate be reduced if the pole is extended to allow a higher attachment above its installed equipment?

But, even more than being absurd, this idea contradicts Supreme Court precedent. This proposal rests on the unstated assumption that a higher pole top rate for wireless facilities is warranted because the pole top is more valuable for *wireless* attachers than for other attachers, *i.e.*, the additional height equates to better radio frequency propagation, while the vertical height of a wireline attachment is not important. Discriminating against wireless facilities in this manner, however, is unlawful. As the Supreme Court found in *Gulf Power*:

> The very reason for the Act is that--as to wires--utility poles constitute a bottleneck facility, for which utilities could otherwise

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[28] *See* 47 U.S.C. § 224(e)(2), (3); *Implementation of Section 703(e) of the Telecommunications Act of 1996*, 12 FCC Rcd 11725, 11730 (1997).

[29] Indeed, different elevations on the pole hold different affinities for various attachers. When John Walson, developer of the first U.S. cable system in Mahanoy City, Pennsylvania, "ran coaxial cable on telephone and power company poles, he placed the amplifiers only nine feet up on the poles rather than farther toward the top as is customary today. He said he wanted a system that could be maintained 'off of a four-foot step ladder.' That way he didn't need to invest in tall ladders or bucket trucks. ... Legend has it that the height of the amplifiers was designed so that [brother] Pete Walsonavich could reach them while standing on the trunk of his Cadillac." Brian Lockman and Don Sarvey, *Pioneers of Cable Television*, (2005) at 17.

> charge monopoly rents. Poles, they say, are not a bottleneck facility for the siting of at least some, distinctively wireless equipment, like antennas. These can be located anywhere sufficiently high.
>
> The economic analysis may be correct as far as it goes. Yet the proposed distinction -- between prototypical wire-based "associated equipment" and the wireless "associated equipment" which allegedly falls outside of the rationale of the Act -- finds no support in the text, and, based on our present understanding of the record before us, appears quite difficult to draw. Congress may have decided that the difficulties of drawing such a distinction would burden the orderly administration of the Act. In any event, the FCC was not unreasonable in declining to draw this distinction; and if the text were ambiguous, we would defer to its judgment on this technical question.[30]

A regulatory regime which allowed unfettered discretion for pole owners to charge premium rates for "pole tops" flies directly in the face of Justice Kennedy's analysis above. In fact, such a regulatory regime would be nearly identical with the fact pattern in *Gulf Power,* which led the Court to affirm that wireless carriers are entitled to nondiscriminatory access to utility poles. A unique, more costly rate scheme applied exclusively to wireless attachers using the top of the utility pole is nothing if not discriminatory.

III. Conclusion

DAS networks promise to bring highly-desired wireless network coverage to areas which have been unreachable by traditional infrastructure.[31] Carriers, however, have been slow to adopt DAS in large measure because of the highly variable and unpredictable cost and speed to

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[30] *National Cable and Telecommunications Assoc., Inc. v. Gulf Power Co.*, 534 U.S. 327, 341 (2002).

[31] In contrast to the often adversarial process of siting a wireless tower, local communities usually embrace and encourage DAS networks. *See, e.g.,* Editorial, "Cellular Reception to Improve Thanks to Muttontown Board", *Oyster Bay Enterprise-Pilot Online Edition*, December 27, 2007 < http://www.antonnews.com/oysterbayenterprisepilot/2007/12/28/opinion/ > (last viewed February 8, 2008). ("While previously towers were needed, now metal boxes mounted on telephone poles will do the job, and several wireless carriers can share that network site. All in all - it looks as if this time things will work out to the benefit of the public. ... our compliments to Mayor Julianne Beckermann and the Board of the Village of Muttontown"). Several of Crown Castle's projects have been initiated by requests from municipalities and landowners seeking wireless coverage without the construction of traditional wireless communications towers.

market, as "DAS operators must navigate through a complex maze of regulatory entitlements and approvals in advance of constructions, [which] . . . adds uncertainty to the DAS permitting process".[32] These concerns, in turn, are fueled in large measure by deficiencies in the current pole-attachment regime.

For these reasons, we respectfully request that the Commission weigh these interests and create appropriate application of the rules to these specialized networks.

Respectfully submitted,

CROWN CASTLE SOLUTIONS CORP.

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Date: March 7, 2008

[32] This is the summarization of The DAS Forum, an industry association bringing together wireless carriers, DAS network operators and equipment vendors. < http://www.thedasforum.org/about/who.php > (last viewed February 14, 2008).